Exceptional winter skywatching opportunities await you in Acadia National Park...

The winter season starts with a total eclipse of the moon which starts at 8:00 p.m. the night of Nov. 8 and reaches maximum about 1:00 a.m. on Nov. 9.

Venus starts appearing low in the west in early Nov. as an evening "star". This brilliant planet will continue to be seen after sunset in the west all winter and right into next summer.

Mars is the bright, reddish planet that is rising in the east just after sunset. It will appear earlier each night and will be easily seen all night throughout the winter months.

As the Earth catches up with distant Jupiter, it will be a late night sight here in Maine. It rises in the east after midnight in November, 10:30 p.m. in December, and then earlier each night. In January look for it as a bright "star" in the east about 9:00 p.m. By the time Spring starts to arrive it will be rising just as the sun sets to the west and will be visible in the sky all night.

Saturn which is much more distant, is rising in the east at 9:00 p.m. but by New Year's it will be rising in the east right at sunset. During the winter months Saturn will be visible all night and if you have a telescope you should easily see the rings as they are tilted very favorably all winter.

With the clear skies of winter we have the brightest of the constellations overhead. At 9:00 p.m. in November we have the Pleides high overhead, and brilliant Orion climbing up out of the eastern horizon. On Christmas Orion is well up in the sky. Continue to watch this best known of the winter constellations as it appears farther and farther to the west as the sky gets dark each night. By the time Spring birds are returning to Acadia this star cluster will be setting in the west and disappear into the evening twilight. Also watch another constellation, probably the best known of all, the Big Dipper as it dives straight down toward the horizon in November, then appears to level out as it rotates around the North Star, and appears flat and level by the end of March.

The clear night skies are good for spending a little time outside looking for meteors. The Leonid meteors will be appearing between November 16 and 20. There is a shower of bright meteors in December called the Geminids, that can be seen between the 7th and

the 17th. There are several smaller clusters of meteors throughout the winter, particularly the first week of January, and the last week of February. Throughout March and into April there are several minor showers and it is possible to see bright meteors and even fireballs at almost any time during the evening hours. Many of these are coming from the east and a good observing location would be along Ocean Drive.

Watch the Moon as it passes by Mars, Jupiter, and Saturn at various times each month all winter. On dark moonless nights notice the Milky Way as it passes overhead from northeast to southwest in December and then gradually swings southward until it runs from north to south but close to the horizon in March.

Starwatching Sites

Two very good locations for skywatching at Acadia during the winter months, which afford both accessibility in winter and good horizons without any light glare, are the Schooner Head overlook and the Fabbri Picnic area. The former looks to the east and affords good parking. This location affords a good look to the east and south with the only bright lights being far across Frenchman Bay. It also provides a good view to the eastern horizon.

The latter location involves a very short walk from your automobile. Park at the picnic area and then walk to the Fabbri Memorial parking area just across the Park Loop Road to the west. This spot allows one to look to the west and northwest. The horizon is a bit higher at this point but still allows an excellent view.

Be Prepared

Warm clothing is critical for winter starwatching. Wind is a major factor and one's face quickly gets cold. A warm coat sufficient to break the wind is a necessity. Due to standing relatively still one needs good footwear and dry socks. Warm but supple gloves are needed as one holds and focuses binoculars and telescopes, and a face mask is also sometimes needed. One will quickly learn that strong winds do not lend themselves to starwatching but the still cold nights, although much more conducive to skywatching are still potentially dangerous.

Bill Townsend is a retired science teacher and former seasonal naturalist at Acadia National Park.

Winter Wildlife

by Ruth Grierson

Frigid temperatures and swirling snowflakes let us know winter has arrived once again. We humans stay indoors or continue activities with some difficulties but we adapt. Wildlife also adapts in order to survive in this harsh environment for several months.

Migrants like hawks and shorebirds leave for warmer areas traveling in large, noticeable flocks. They pass over this island, landing only briefly, as they hunt for food to sustain them on their long journeys. Summer nesters like hummingbirds and kingfishers quietly leave. Our resident birds continue to feed in their chosen habitats but groups of chickadees, nuthatches, goldfinches, creepers, and woodpeckers often travel about in small mixed flocks in the winter and can be seen feeding in thickets.

We have a good number of resident birds on this island and to them are added migrants from the north coming south to spend the winter here. Snowy owls appear in late October and a Great Gray or Boreal owl may appear as well. A few Glaucous and Iceland Gulls join Black Back Gulls and Herring Gulls at local dumps and along the shore. Snow Buntings, Horned Larks and Purple Sandpipers become birds to look for along shores and rocky jetties throughout the winter.

Snowshoe Hares and Long Tailed Weasels turn white in anticipation of a snow covered landscape in which they can then move about unseen by predators. Their fur also becomes denser. Beavers have prepared well in stockpiling food under water so it is easily accessible from their lodges. The lodge may be visible to us in a frozen pond, but the beavers remain hidden away, cozy and comfortable inside. Otters continue to move about in the snow and seem to revel in sliding on their sleek bodies down some snowy incline.

Foxes and coyotes are on the move throughout the winter but hunting is more difficult, especially if the snow is deep for their rodent prey remains hidden under the protection of snow. Moose and deer find it harder to move about when the snow is deep or if a crust forms on the surface. Snow depth is an important factor in survival. Deer and moose often yard up, with their own kind, under a canopy of trees to conserve heat and get protection from chilling winds.

Our native squirrels cope differently. Gray, Flying and Red squirrels keep active all winter except in severe storms for they have hidden food caches to help them survive and they are regular visitors to local feeders. Chipmunks are sleeping underground, only waking now and then to eat from their nearby stored food supplies.

Most insects are inactive; some residing in galls on plants poking up in the snow and

others tucked away under the bark of trees, under old boards and in rocky crevices. It is these tucked away insects that chickadees, nuthatches, woodpeckers and creepers search for avidly each day. Occasionally a Mourning cloak butterfly, wintering over as an adult, will come out on the snow on a warm day in January or February to briefly flutter about and then go back in hiding.

Plants are dormant and survive best under a blanket of snow protecting them

from browsers, and drying out from chilling winds. Turtles and frogs in local ponds have settled into the mud but occasionally will be seen moving slowly along beneath clear ice. Snakes have gone below the frost line and with the exception of the garter snakes will not be seen until warm spring days arrive. Garter snakes are able to tolerate lower temperatures than the others and may even be seen out in the snow on a sunny day. Courtship starts for Great Horned Owls well before winter is over and their courtship hooting is a familiar sound in late winter.

Wildlife is not as noticeable in a snowy landscape where some creatures sleep, hide, and reduce activities. Mammals living on the edge of survival in such a harsh environment tend to be more secretive and are reluctant to spend extra energy at a time when food is hard to find. Take time after a new snowfall to look for tracks of mammals moving about. This may be your best indication that they are present in an area.

Although a Maine winter can be difficult, creatures and plants living here are uniquely adapted for survival. At best, winter is a time when creatures live on the edge of life and death. A catastrophe for one animal means food and life for another. The hunted breathe a little easier under a protective snow covering but hunters have to work harder. The interaction between animals and plants

and snow and cold is very complex. Whatever a Maine winter brings to wildlife in the forms of ice, snow, cold, and freezing winds they cope in their individual ways so that life goes on with great energy when spring once again returns to the northeast.

Ruth Gortner Grierson is a year-round resident of Mount Desert Island with her dog friend "Elle." She writes a weekly nature column for a local newspaper and has written four books: Nature Diary of Mount Desert Island, The Wonderful Wildflowers of Mount Desert Island, Wildlife Watcher's Guide to Acadia, and she also co-authored Living On The Edge.



Summer Visitor Center 102/198 Lake Wood Park HQ and Winter Info Station Somesville Sieur de Mont Spring Q Dorr Mt. Cadillac Mt Champlain Mt Beehive Mt = Sand Beach Long Pond Penobscot v PA Echo Lake **Thunder Hole** Otter Cliffs Otter Point Lower Hadlock Pond Mansell Mt. Bernard Mt. Seal Harbo Northeast Harbor 102A Take this and a more detailed map with you. Maps are available at the Headquarters Information Station. Seawall Campground Bernard Bass Harbor **Bass Harbor Head** miles

- * Skiing, snowshoeing, and snowmobile routes are shown in red.
- * One way regulations do not apply to skiers, snowshoers, and snowmobilers.
- * Please do not block park gates. In case of emergency, responders need access.
- * Do not drive through open gates that have unplowed roads beyond.

Legend

